Economic Assumptions for Royalty Relief Evaluations
Effective March 1, 2018

Introduction – Applicants for deepwater royalty relief for leases sold prior to late 1995 use a cash-flow model called RSVP. Until May 1, 1999, the economic parameters for this model were published by MMS' Gulf of Mexico Region in the form of a Notice to Lessees (NTL). However, NTL 99-G06 (May 1, 1999) established a regular quarterly schedule to address necessary changes to these prices and to publish updates over the internet, without issuing a new NTL. The planned quarterly schedule for updating is around February 1, May 1, August 1, and November 1.

How to use this update of economic parameters – You should first download or obtain the version of RSVP named in the table below. The model as you receive it will contain price inputs that may be out-of-date. It is your responsibility to inspect the model's "Viability Module, Oil Price Inputs and Gas Price Inputs" and to revise cell entries, including associated Crystal Ball input windows, replacing out-of-date values by the updated values.

Overview of this update – For this update, the starting prices are set for 2017. If your application includes production in 2016, please contact us for the prices to use.

The most-likely oil and gas prices for 2018 are based on the Energy Information Agency (EIA) *Short Term Energy Outlook* (STEO) published in February 2018. The starting price for oil is the average of the estimated next six months of STEO prices for Refiner's Acquisition Cost (RAC). The starting price for gas is the combined average of the last six months and the next six months of gas prices according to the STEO Henry Hub as published in $/Mcf. Based on the most recent STEO, the most likely starting oil price for 2018 is set at $59.62/bbl, and the most likely starting gas price is set at $3.22/mcf.

Updated table of parameters – The entire table of parameters including the updates is:

Parameter	*Minimum*	*Most Likely*	*Maximum*	*Dependency*
Version of RSVP		2.14		
Year of Initial Oil Price		2018		
Initial Oil Price, landed (2017$/bbl)	$49.04	$59.62	$69.16	
Real Oil Price Growth Rate 1	-0.41%	0.10%	0.67%	
Year Second Oil Scenario Starts	2nd rates are first applied to infer 2022 price from 2021			
Real Oil Price Growth Rate 2	1.04%	2.11%	2.96%	
Year Third Oil Scenario Starts	3rd rates are first applied to infer 2028 price from 2027			
Real Oil Price Growth Rate 3	0.44%	1.85%	2.65%	
Year of Initial Gas Price		2018		
Initial Gas Price, landed (2017 $/Mcf)	$2.57	$3.22	$3.89	+1 with Oil Start Price
Real Gas Price Growth Rate 1	-0.50%	0.35%	0.90%	+1 with Oil Growth Rate 1
Year Second Gas Scenario Starts	2nd rates are first applied to infer 2022 price from 2021			
Real Gas Price Growth Rate 2	-0.7%	0.41%	1.34%	+1 with Oil Growth Rate 2
Year Third Gas Scenario Starts	3rd rates are first applied to infer 2028 price from 2027			
Real Gas Price Growth Rate 3	-0.83%	0.62%	2.01%	+1 with Oil Growth Rate 3
Federal Income Tax Rate		21%		
Base Year for Discounted Cash Flow	Year of Application Date			
Discount Rate Range	10%		15%	
Random Number Seed		104		
Overhead Cost Allowance		5%		

Graphs – Forecasts are illustrated using most likely parameters, minimum parameters, and maximum parameters, and the price thresholds are shown.